



REMARKS

These remarks are in response to the non-final Office Action mailed 02/16/05. Claims 15-17 have been withdrawn as being directed to a non-elected group. Claims 18-23 have been added by this Amendment. Claims 1-14 and 18-23 are currently under examination in this application.

Election/Restrictions

Applicant acknowledges that the Examiner considers method claims 15-17 to be a separate and distinct invention from the apparatus claims. Accordingly, claims 15-17 have been withdrawn from examination in this application. Applicant reserves the right to introduce claims 15-17, and claims of similar and different scope, in a divisional or other continuing application.

Rejection under 35 U.S.C. 102(e)

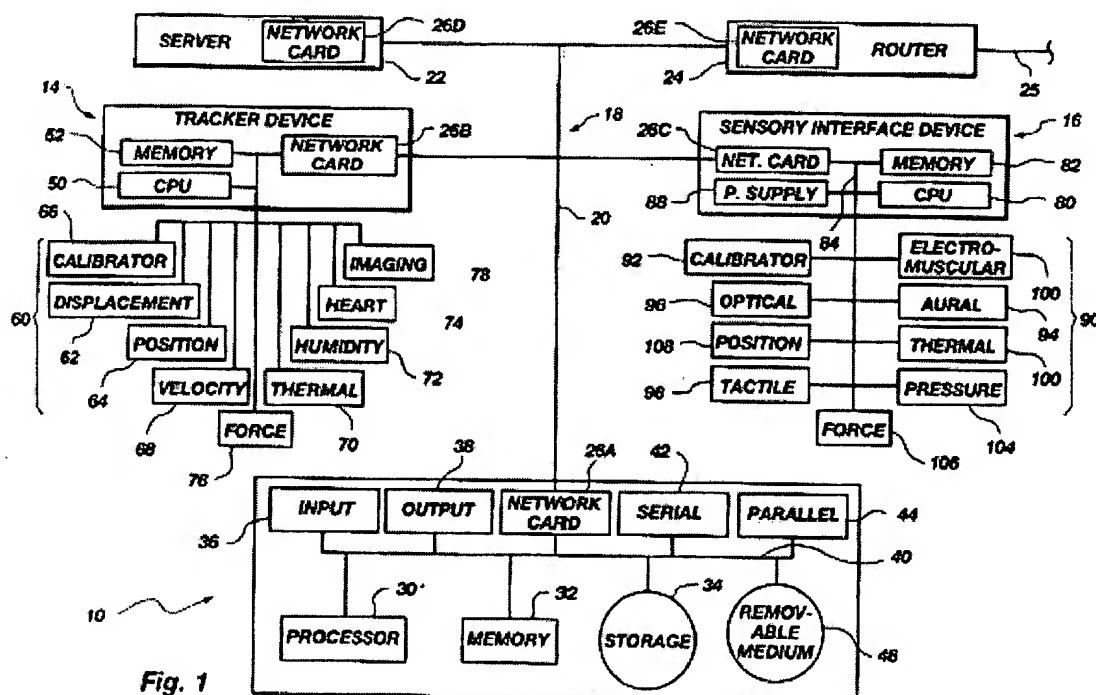
Claims 1-14 were rejected under 35 U.S.C. 102(e) as being anticipated by Poulton. Applicant respectfully traverses. However, and solely for the purpose of expediting the prosecution of this application, Applicant has amended the claims to clarify the claimed embodiments. Applicant reserves the right to swear behind Poulton and other 102(e) and 102(a) references at a future date.

Poulton Distinguished

According to Poulton's abstract, the invention of Poulton includes an apparatus for providing stimuli to a user while sensing the performance and condition of the user may rely on a controller for programmably coordinating a tracking device and a sensory interface device. The tracking device may be equipped with sensors for sensing position, displacement, motion, deflection, velocity, speed, temperature, humidity, heart rate, internal or external images, and the like. The sensory interface device may produce outputs presented as stimuli to a user. The sensory interface device may include one or more actuators for providing aural, optical, tactile, and electromuscular

stimulation to a user. The controller, tracking device, and sensory interface device may all be microprocessor controlled for providing coordinated sensory perceptions of complex events.

The “controller 12” of Poulton is a computer system, which is either unlabeled or mislabeled “10” in Fig. 1 (reproduced below).



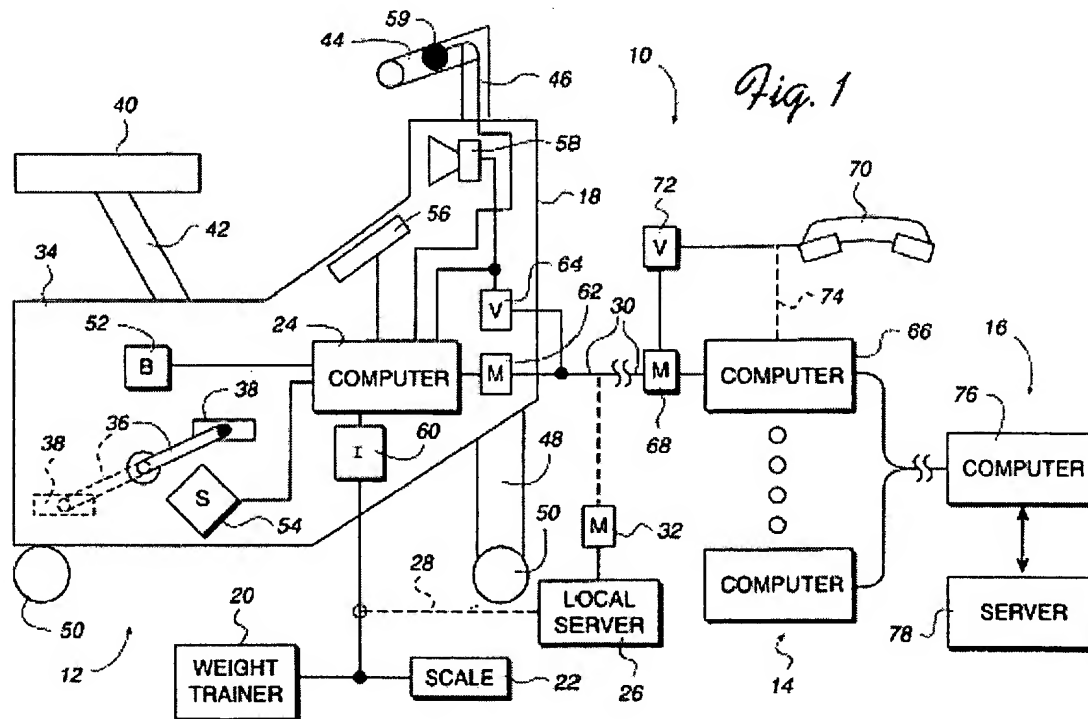
As can be seen in Fig. 1 of Poulton, the controller “10” is connected to a network 20 via a network card 26A. Also connected to the network 20 is a “tracker device” 14 and a “sensory interface” device 16 by network cards 26B and 26C, respectively. The tracker device 14 is coupled to one or more sensors, such as a position sensor 64 or a heart sensor 74. The sensory interface device 16 is coupled to one or more actuators, such as a tactile actuator 96 or a force actuator 106.

Poulton also discloses a “server” 22 that is coupled to the network 20 by a network card 26D, and a router 24 coupled to the network 20 by a network card 26E. This is described in Poulton as follows:

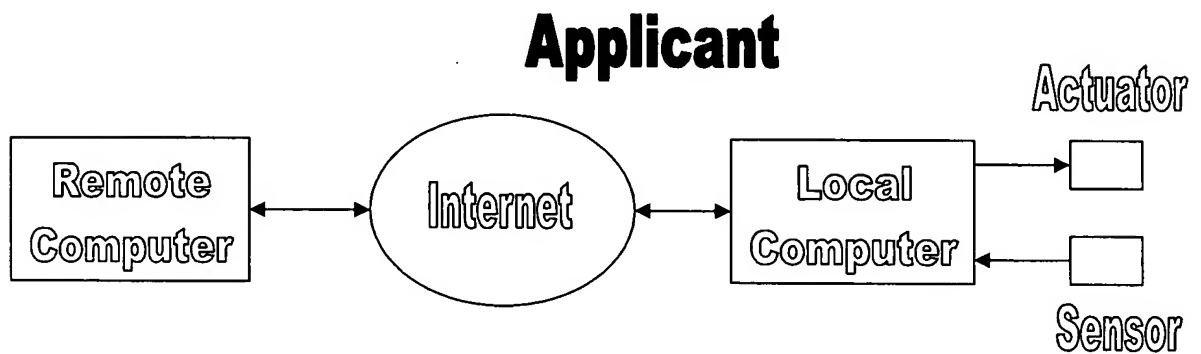
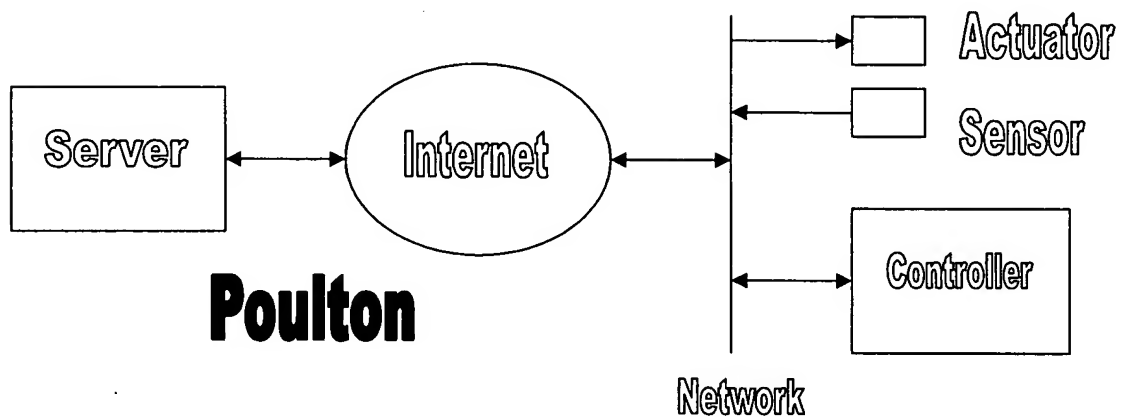
A router 24 may also be connected to the network 20 for providing access to a larger internetwork, such as the worldwide web or internet. The operation of servers 22 and routers 24 reduce the duty required of the controller 12, and may also permit interaction between multiple controllers 12 separated across internetworks. Poulton, column 7, lines 8-13.

As disclosed by Poulton, the servers 22 and routers 24 reduce the duty required of controller 12. This is because the actuators, sensors, servers and routers are coupled to the same network 20. That is, the actuators and sensors are accessed directly by the servers and routers, *thereby reducing the duty* required of the controller 12. In other words, the local controller is bypassed, in part or in whole, by the servers and routers.

Applicant's claimed embodiments as set forth in claims 1-9 are much different from the disclosure of Poulton. That is, the local computer of Applicant's claim embodiment is *interposed* between a remote computer and the sensors and actuators of the exercise equipment. This can be clearly seen in Applicant's Fig. 1



A comparison between the system disclosed by Poulton and Applicant's claimed embodiments makes the differences immediately clear. A diagram is provided below for the convenience of the Examiner.



Applicant's system has a number of distinct advantages over Poulton's. First, since the local computer controls the actuator, the Internet connection can be intermittent. With Poulton, the server cannot control the actuator without an always active Internet connection. Second, the Internet can be unreliable; e.g. sometimes the Internet loses or corrupts data packets. With the Poulton's server in direct control of the actuator, this could be very dangerous. For example, if a corrupted or lost signal sent over Poulton's Internet connection caused an actuator to exert too much force, it could injure a user. Finally, sending and receiving signals over the Internet causes significant signal delays, making it difficult or impossible to have a rapid feedback loop between the sensor and actuators.

With Applicant's claimed embodiments, where the local computer is *interposed* between the Internet and the actuator, these problems do not exist. That is, Applicant's system can work independently of an Internet connection, since the local computer controls the actuator and responds to the sensor. The aforementioned problems of data loss or corruption over an Internet connection are also eliminated. Finally, since the local computer is in direct communication with the actuator and the sensor, fast feedback loops can be provided between the sensor and the actuator.

In view of the foregoing remarks, Applicant submits that claim 1 and dependent claims 2-9 are patentably distinct over Poulton, and respectfully requests that the rejection of claims 1-9 be withdrawn.

With respect to claims 10-14, Poulton *teaches away* from controlling an operation of an exercise apparatus based upon a *modifiable* script. That is, Poulton, as in the admitted prior art, can provide programmed instructions for controlling an exercise apparatus. This is found in numerous locations in his specification, the following being only three examples:

It is an object of the invention to provide a method of exercising to include setting a control of an electromuscular stimulation device to deliver sensory impact to muscles of a user at interactively determined times, in accordance with settings input by a user, *pre-programmed control parameters*, and feedback signals corresponding to a selected condition of a user provided from a sensor of a tracking device. Poulton, col. 3, lines 4-11.

Such inputs may be provided by *pre-inputs, programmed instructions or controlling data pre-programmed* into setup databases 150, 160, actuator tables 158, 168 or operational databases 152, 162. Poulton, col. 15, lines 46-49.

Each pair of electrodes 222, 224 may be controlled by a combination of open loop control (*e.g. inputs from a pre-programmed code or data*), man-in-the-loop control, (e.g. inputs from a user input into the controller 12 by way of the programming interface module 124), feedback control (e.g. inputs from the tracking system 14 to the controller 12), or any combination selected to optimize the experience, exercise, or training desired. Poulton, col. 16, lines 22-30.

Applicant acknowledges that pre-determined programming, taken alone, for exercise equipment is prior art. For example, Applicant in his specification discloses:

[A] large industry has arisen to provide exercise and health equipment for the home. This equipment tends to be more of the aerobic type, e.g. stationary bicycles, rowing machines, "step" machines, etc., although weight lifting apparatus, sometimes referred to as "resistance trainers," are also widely used in the home. These types of home exercise and health equipment increasingly use sophisticated electronics, such as microprocessors, to monitor the level of exercise and to provide exercise programs for the user. Applicant's Specification, page 2, lines 5-11.

Applicant, in contrast to Poulton and other prior art exercise equipment with unmodifiable scripts, teaches that the script can be modified in the local computer. In one example, Applicant describes:

In FIG. 8c, a plot of the user's weight as taken from scale 22 is shown illustrating the day-by-day weights of the user during part of the month of January. In this way, users are provided with good feed-back concerning the progress he/she is making in reaching their ideal weight. This information can be used by the remote or server systems to modify the exercise scripts and/or provide dietary counseling or products to the individual users of local stations 12. Applicant's Specification, page 18, lines 8-13.

There is no teaching in Poulton of the possibility of modifiable scripts. In fact, by teaching "pre-inputs, programmed instructions or controlling data pre-programmed into setup databases", he *teaches away* from modifiable scripts as claimed by Applicant. Applicant therefore respectfully requests that the rejection of claims 10-14 be withdrawn.

New claims 18-23 are directed to additional embodiments. They are also considered to be patentable over Poulton and the other art of record.

Conclusion

Applicant considers all pending claims to be patentable, and respectfully requests a Notice of Allowance from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, he is respectfully requested to call the undersigned at 650-333-0180.

Date: 8/16/08

Respectfully submitted,



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